CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

ORDER NO. R5-2004-0136

NPDES NO. CAS0084077

WASTE DISCHARGE REQUIREMENTS
FOR
STOCKTON PORT DISTRICT
FACILITY-WIDE STORM WATER DISCHARGES FROM
MUNICIPAL SEPARATE STORM SEWER SYSTEM AND
NON-STORM WATER DISCHARGES FROM THE PORT OF STOCKTON
SAN JOAQUIN COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter "Regional Board") finds that:

- 1. The Stockton Port District (hereafter "Discharger") is a special district that owns and operates the Port of Stockton and its storm sewer system. The Port is located within the City of Stockton, which is the largest city in San Joaquin County, with a population of about 250,000. In 1997, the Regional Board issued a municipal storm sewer permit to the Discharger that regulated it as a medium municipal separate storm sewer system under federal storm water regulations (40 CFR Section 122.26(b)(7)). This action was taken with the consent of the Discharger, which wished to be regulated separately from the City of Stockton. The portion of the storm sewer system operated by the City of Stockton is separately regulated under different waste discharge requirements (Order R5-2002-0181).
- 2. The primary activities conducted at the Port are the industrial unloading, warehousing, and loading of goods for production and distribution. As a municipality, the Port functions mainly in pursuit of industrial purposes, although it does include limited commercial enterprises.
- 3. The Port is divided into a West Complex (formerly Rough & Ready Island) and an East Complex. The 640-acre East Complex is older and more developed than the West Complex, which was acquired from the United States Navy in September 2003. The West Complex is being converted and developed for full-scale shipping and manufacturing operations, which will include maritime, industrial, and commercial uses.
- 4. The 1,460-acre West Complex is surrounded by water: The Deep Water Ship Channel (DWSC) on the north, Burns Cutoff on the south and west, and the San Joaquin River to the east. The site was formerly the U. S. Naval station and was previously zoned for institutional uses. The Discharger is pursuing a change of land use designation in order to accommodate maritime, industrial and commercial land uses. The project would include the redevelopment of marine terminals on the existing 500 acres northern portion of the island and the development of a commercial and industrial park on the undeveloped 500 acres portion of the island.
- 5. Discharges from the Port's storm sewer system consist of storm water runoff and non-storm water discharges, which discharge directly or indirectly to the San Joaquin River and the

Stockton Deep Water Channel, a tributary to the San Joaquin River, as shown in the site location map in Attachment A. The receiving waters around the Port are tidally influenced.

- 6. Some parts of the West Complex have elevations below the surrounding water bodies, which cause the surface percolation of groundwater in these areas. This percolated groundwater is drained with reclamation ditches to a pump station, which discharges the groundwater to the San Joaquin River. Because the West Complex is known to have several areas where the underlying groundwater has been degraded from historical operations, groundwater discharges may be a source of pollution to surface waters.
- 7. This Order does not authorize the discharge of waste associated with groundwater pumping for the containment of contaminated groundwater plumes at the West Complex. Rather, the Discharger must submit a Report of Waste Discharge for coverage of the groundwater pumping operations, or submit a Notice of Intent for coverage under an applicable General NPDES Permit (e.g., low threat discharge, or groundwater treated for removal of fuel products or industrial solvents).
- 8. As a large industrial facility, the Port should be subject to an equivalent discharge standard as other industrial sites. Discharge Prohibition A.3 therefore defines the MEP standard to be equivalent to Best Available Technology Economically Achievable for non-conventional and toxic pollutants (BAT), and Best Conventional Technology Economically Achievable for conventional pollutants (BCT) for the purposes of this Order; however, the Regional Board recognizes that the character of the Port's discharge (especially discharges from the West Complex) could change in the future, either because the nature of the tenants changes or because the Discharger may at some point segregate industrial discharges from other discharges (i.e., commercial and perhaps residential). Should the Discharger demonstrate that certain non-commingled storm water discharges to receiving waters are not industrial in nature, the Regional Board may consider revising Effluent Limitation B.1 to define the discharge standard for those flows as strictly MEP rather than equivalent to BAT/BCT.
- 9. The Port discharges urban runoff¹ from the East Complex retention basin to the San Joaquin River, a water of the United States, at the point latitude 37° 56'16" and longitude 121° 20'04". In addition, there are five major storm sewer discharges from the East Complex that flow via gravity into the DWSC. The West Complex has one major storm sewer discharge that flows to a pump station; discharge from the pump station is to the Burns Cutoff.
- 10. The loading and unloading of materials from vessels and trains at the Port may result in pollutants (e.g., fertilizers and livestock feed) being spilled on the ground and discharged to adjacent water bodies, or being directly spilled into those water bodies. Discharge Prohibition A.5 generally prohibits the discharge of pollutants; however, this prohibition is not violated if the Discharger demonstrates that the discharge did not cause or contribute to an exceedance of an applicable water quality standard, and that it implemented best management practices (BMPs) meeting the BAT/BCT standard (a requirement of this Order).

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¹ See Attachment B for a definition of "urban runoff" and other relevant terms.

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- 11. The Discharger and its tenants are engaged in the shipping, loading and unloading (vessels and trains) of bulk commodities at the East Complex. These commodities include, but are not limited to, bulk fertilizers, prilled sulfur, cement, cottonseed, anhydrous ammonia, liquid fertilizer, petroleum coke, coal, molasses, bagged rice, scrap metal and steel products. Because handling bulk commodities at the Port may result in pollutants (e.g., fertilizers and livestock feed) being spilled on the ground and discharged to adjacent water bodies, or being directly spilled into those water bodies, monitoring during these activities is appropriate.
- 12. Cargo ships are stabilized by filling ballast tanks or discharging water from them. The discharge of ballast tank water may result in non-native invasive species being introduced into the Delta. The organisms can become established in the Delta, where they may displace native species or cause significant ecological damage. In addition, ballast water may contain pathogens and other waste materials that may impact the beneficial uses of the Delta. Cargo ships have large ballast tanks, up to 30,000 cubic meters. International agreements² require cargo ships to intake and discharge ballast tank water in pelagic waters to the maximum extent practicable. This Order requires the Discharger to conduct outreach to ship operators to ensure they are aware of these agreements. This Order does not, however, have a flat prohibition on ballast water discharge because adjustments in ballast water may be necessary to ensure the stability of docked vessels.
- 13. The Port currently has about 30 industrial tenants, most of which are engaged in material storage, handling and transfer. These materials include fertilizers, sulfur, scrap metals, petroleum products, and sugars. One tenant at the Port is engaged in electricity generation using coal-fired boilers. The Port's Storm Water Management Plan (SWMP) will include a complete accounting of its industrial tenants, including their locations and activities.

Discharge Characteristics

- 14. Development and urbanization increase pollutant load, volume, and discharge velocity. First, natural vegetated pervious ground cover is converted to impervious surfaces such as paved highways, streets, rooftops and parking lots. Natural vegetated soil can both absorb rainwater and remove pollutants, thereby providing an effective natural purification process. In contrast, pavement and concrete can neither absorb water nor remove pollutants, and thus the natural purification characteristics are lost. Second, urban development creates new pollution sources as the increased human presence brings proportionately higher levels of vehicle emissions, vehicle maintenance wastes, municipal sewage waste, pesticides, trash, and other anthropogenic pollutants.
- 15. The quality and quantity of storm sewer discharges vary considerably because of the effects of hydrology, geology, land use, season, and sequence and duration of precipitation events. Urban storm water discharges may contain pollutants that may lower the quality of receiving waters and adversely impact beneficial uses of the San Joaquin River and Delta. Studies indicate that there may be increases in pollutant levels and aquatic toxicity in receiving waters as a result of urban storm water discharges.

² International Maritime Organization, International Convention for the Control and Management of Ships Ballast & Sediments, adopted February 2004.

- 16. Pollutants that may be contained in storm water include, but are not limited to: certain heavy metals; sediments; petroleum hydrocarbons from sources such as used motor oil; microbial pathogens; pesticides; sources of acute and chronic aquatic toxicity; and nutrients that cause or contribute to the depletion of dissolved oxygen or toxic conditions in the receiving water. Excessive flow rates of storm water may cause or contribute to downstream erosion or excessive sediment discharge and deposition in stream channels.
- 17. Water quality assessments have identified impairment, or threatened impairment, of beneficial uses of water bodies in the Stockton urbanized area. The causes of impairments include oxygen demanding substances, certain heavy metals, pesticides, and pathogens. Pollutants in storm water can have damaging effects on both human health and aquatic ecosystems.
- 18. The Discharger has conducted bioassay testing using fat head minnows, a warm water species; however, Chinook salmon and Central Valley steelhead are known to migrate from November through May and also use the surface waters for cold habitat. In addition, the Basin Plan identifies the receiving water as having beneficial use as coldwater habitat and for coldwater migration. Because the discharge may occur during periods when coldwater species are present, bioassay monitoring using a coldwater species is appropriate. Therefore, bioassay testing conducted during the period of November through May should use rainbow trout, the appropriate coldwater species. During remaining periods, the Discharger should continue to perform bioassay testing using fat head minnows

Statutory and Regulatory Considerations

- 19. The CWA authorizes the U.S. Environmental Protection Agency (USEPA) to permit a state to serve as the NPDES permitting authority in lieu of the USEPA. The State of California has inlieu authority for the NPDES program. The Porter-Cologne Water Quality Control Act authorizes the State Water Resources Control Board (State Board), through the Regional Boards, to regulate and control the discharge of pollutants into waters of the State. The State Board entered into a Memorandum of Agreement with the USEPA, on 22 September 1989, to administer the NPDES Program governing discharges to waters of the United States.
- 20. Section 402 (p) of the CWA (33 U.S.C. § 1342(p)) provides that municipal storm sewer permits must "require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design engineering method and such other provisions as the [USEPA] Administrator or the State determines appropriate for the control of such pollutants." The State Board's Office of Chief Counsel (OCC) has issued a memorandum interpreting the meaning of MEP to include technical feasibility, cost, and benefit derived with the burden being on the permittee to demonstrate compliance with MEP by showing that a BMP is not technically feasible in the locality or that BMP costs would exceed any benefit to be derived (dated 11 February 1993).
- 21. It is the Regional Board's intent that this Order shall ensure reasonable further progress toward the attainment of applicable water quality standards and protection of beneficial uses of receiving waters. This Order therefore prohibits discharges from causing violations of applicable water

quality standards or causing conditions to occur that create a condition of nuisance or water quality impairment in receiving waters as a result of municipal storm sewer discharge. Accordingly, this Order requires the effective implementation of BMPs to reduce pollutants in storm water discharges to the MEP.

- 22. Section 402(p)(3)(B)(ii) of the CWA requires NPDES permits to effectively prohibit non-storm water discharges into municipal storm sewers. The CWA's corresponding regulations (40 CFR 122.26(d)(2)(iv)(B)(1)) require control programs to prevent illicit discharges to municipal storm sewers. Certain categories of non-storm water discharges or flows are allowed to enter the municipal storm sewers provided that the Discharger has not identified such categories as sources of pollutants to waters of the United States.
- 23. Federal regulations (40 CFR 122.26(d)(2)(iv)(B)(1) and 40 CFR 122.26(d)(2)(iv)(C)) require that municipal storm sewer permittees implement a program to monitor and control pollutants in discharges to storm sewers from industrial and commercial facilities that contribute a substantial pollutant loading to storm sewers. This permit, consistent with the USEPA policy, incorporates a cooperative partnership, including the specifications of minimum expectations, between the Regional Board and the Discharger for the inspection of priority industrial facilities and commercial facilities to control pollutants in storm water discharges (58 Fed. Reg.61157).
- 24. The State Board has issued NPDES General Permits for the regulation of storm water discharges associated with industrial activities (General Industrial Permit). In addition, the Regional Board has issued General Permit Order No. 5-00-175 for dewatering and other low threat discharges, which authorizes such discharges to the storm sewers owned and operated by the Discharger. The reissued municipal storm sewer permit requires the Discharger to conduct local compliance inspections at industries or construction sites covered under State NPDES General Permits that discharge to their storm sewers. The Discharger is not authorized to enforce these NPDES permits; however, the Discharger, through inspection of these facilities for compliance with tenant agreements, can bring apparent General Permit compliance problems to the attention of Regional Board staff as a means of attaining more widespread compliance.
- 25. When industrial or construction site discharges occur in violation of tenant agreements, the Regional Board will first rely on the Discharger to take appropriate actions. If the Discharger has demonstrated a good faith effort to educate and enforce but remains unsuccessful, the Regional Board may then step in to enforce the applicable General Permits. If the Discharger has been negligent in its enforcement efforts in compliance with this Order, the Regional Board may initiate enforcement action against both the industrial or construction discharger (under the statewide General Permits), as well as against the Discharger for violations of this Order. The Discharger must also provide an adequate level of enforcement action against illegal discharges from other land uses covered by this Order and authorized by the Discharger.
- 26. The Regional Board adopted a *Water Quality Control Plan, Fourth Edition, for the Sacramento and San Joaquin River Basins* (hereafter Basin Plan). The Basin Plan designates beneficial uses, establishes water quality standards, and contains implementation programs and policies to achieve water quality standards for all waters of the Basin. This Order implements the Basin

Plan primarily through the effective implementation of BMPs to reduce pollutants in storm water discharges to the MEP.

- 27. The beneficial uses of the Sacramento-San Joaquin Delta are municipal and domestic supply; agricultural irrigation and stock watering; industrial process and service supply; water contact recreation; non-contact water recreation; warm fresh water habitat; cold fresh water habitat; warm water migration; cold water migration; warm water spawning; wildlife habitat; and navigation. The beneficial uses of groundwater beneath the Port are municipal and domestic supply, industrial service and process supplies, and agricultural supply.
- 28. The USEPA published an 'Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits' on 26 August 1996 (61 Fed. Reg. 43761). This policy discusses the appropriate kinds of water quality-based effluent limitations to be included in NPDES storm water permits to provide for the attainment of water quality standards. The policy states that, "the CWA does not say that effluent limitations need be numeric." As a result, the policy concludes that USEPA and the States have flexibility in terms of how to express effluent limitations. This position was subsequently upheld in court when the Ninth Circuit's decision in Defenders of Wildlife vs. Browner found that the establishment of numeric effluent limits is not required.
- 29. On 17 June 1999, the State Board adopted Order No. WQ 99-05, which, in a precedent-setting decision, identified acceptable receiving water limitations language to be included in municipal storm sewer permits issued by the State and Regional Boards. The receiving water limitations included herein are consistent with the State Board Order, USEPA policy, and the U.S. Appellate court decision in, *Defenders of Wildlife v. Browner* (9th Cir, 1999). In a memorandum dated 14 October 1999, the State Board OCC determined that the federal court decision did not conflict with State Board Order No. WQ 99-05.
- 30. Consistent with other NPDES permit for municipal storm sewer system discharges, the effluent limitations in this Order are narrative, and include the requirement to reduce pollutants in storm sewer discharges to the MEP. This Order requires the implementation of BMPs and performance standards identified in the Port's SWMP to control and abate the discharge of pollutants in storm water discharges. Implementation of BMPs and compliance with performance standards in accordance with the Port's SWMP and its schedules constitutes compliance with the MEP standard.
- 31. This Order includes a Monitoring Program that incorporates analytical Minimum Levels (MLs) established under the State Board's *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP). The SIP's MLs represent the lowest quantifiable concentration for priority toxic pollutants that is measurable with the use of proper method-based analytical procedures and factoring out matrix interference. The SIP's MLs therefore represent the best available science for determining MLs and are appropriate for a storm water monitoring program. The use of MLs allows the detection of toxic priority pollutants at concentrations of concern using recent advances in chemical analytical methods.

- 32. On 12 March 2001, the U.S. Court of Appeals ruled that it is necessary to obtain a NPDES permit for application of aquatic pesticides to waterways (*Headwaters, Inc. vs. Talent Irrigation District*, 243 F.3d. 526 (9th Cir. 2001). This decision is controlling in California for nonagricultural applications of pesticides to waterways. The State Board adopted a general NPDES permit (Order No. 2001-12-DWQ) on 19 July 2001, for public entities that discharge pollutants to waters of the United States associated with the application of aquatic pesticides for resource or pest management. Public entities that conduct such activities must seek coverage under this general permit.
- 33. The action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA; Public Resources Code, § 21100, et. seq.) in accordance with Section 13389 of the California Water Code.
- 34. In June 2004, the Discharger approved the Environmental Impact Report (EIR) for development of the West Complex. This EIR documents several hydrology and water quality mitigation measures that the Discharger intends to implement. The Regional Board finds that it is appropriate that these mitigation measures be incorporated into the Discharger's revised SWMP. This Order therefore contains a provision requiring this incorporation.
- 35. The EIR for the development of the West Complex contains a mitigation measure (4.7.3b) wherein the Discharger pledged to implement a combination of structural improvements, treatment systems and source controls to ensure, at a minimum, no net increases in pollutant loads compared to pre-project conditions. This Order contains requirements for the Discharger to estimate its pollutant loads during the permit term and evaluate historic trends. The Regional Board will consider this evaluation during the future reissuance of the Discharger's municipal storm sewer permit, with inclusion of corrective actions as appropriate if there is evidence that pollutant loads are increasing.
- 36. This Order does not authorize any take of endangered species. To ensure that endangered species issues have been raised to the responsible agencies, the Regional Board notified the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and the California Department of Fish and Game of Regional Board consideration of this Order.
- 37. This Order is not intended to prohibit the inspection for or abatement of vectors by the State Department of Health Services or local vector agencies in accordance with California Health and Safety Code § 2270 et seq. and §116110 et seq. Certain treatment control best management practices (BMPs) if not properly designed, operated or maintained may create habitat for vectors (e.g., mosquitoes and rodents). The Regional Board expects the Discharger to closely cooperate and collaborate with local vector control agencies and the State Department of Health Services for the implementation, operation, and maintenance of treatment control BMPs in order to minimize the risk to public health from vector borne diseases.
- 38. This Order provides NPDES permit coverage for the Discharger's storm water and non-storm water discharges, including both industrial discharges and municipal discharges. Therefore, the Discharger is not required to obtain separate coverage for its industrial facilities pursuant to the General Industrial Permit. Accordingly, this Order contains equivalent requirements as those

found in the General Industrial Permit for industrial site inspections, water quality monitoring, annual site compliance review, and preparation of a storm water pollution prevention plan. These requirements apply to Discharger-operated facilities that would otherwise require and qualify for coverage under the General Industrial Permit (i.e., those industrial facilities that are required by U.S. Environmental Protection Agency regulations to obtain an industrial storm water permit as listed in the General Industrial Permit; currently, the Discharger's maintenance shop, fleet vehicle fueling area, equipment wash pad, and fertilizer warehouses).

- 39. Although this Order provides NPDES permit coverage in lieu of coverage under the General Industrial Permit, this Order requires that qualifying sites (i.e., those Discharger-operated facilities that would otherwise be covered under the General Industrial Permit as described in Finding 38) be held to the "strict liability" compliance standard of the General Industrial Permit rather than the less rigorous "iterative process" compliance standard for municipal storm sewer permits. In other words, the discharges of pollutants from Discharger-operated facilities that would otherwise be covered under the General Industrial Permit are in violation of the Clean Water Act and the CWC Division 7 if such discharges cause or contribute to exceedances of applicable water quality standards.
- 40. The discharge to the retention pond is exempt from the requirements of *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste,* as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 2005, et seq. Pursuant to Section 20090(b), the exemption is based on (1) the Regional Board is issuing waste discharge requirements; (2) the discharge complies with the Basin Plan; and (3) the wastewater does not need to be managed according to Title 22 CCR, Division 4.5, and Chapter 11, as a hazardous waste.
- 41. The maintenance of biodiversity is an appropriate performance standard for the Port's storm water management program. This Order therefore requires the Discharger to conduct a bioassessment of its jurisdiction and the receiving waters it discharges to. In August 2002, the Regional Board approved a municipal storm sewer discharge permit for the City of Stockton and the County of San Joaquin that also included a bioassessment requirement. The Regional Board intends for the Discharger to coordinate its efforts with the City and County to share resources where appropriate, and to create a "seamless" bioassessment for the entire Stockton Urban Area.

Anti-degradation Policy

42. State Board resolution No. 68-16 (hereafter Resolution 68-16 or the "anti-degradation policy") requires the Regional Board, in regulating the discharge of waste, to maintain high quality waters of the State until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Regional Board's policies (i.e., quality that exceeds water quality objectives). Resolution 68-16 requires that the discharge be regulated to meet best practicable treatment and control (BPTC) to assure that pollution or nuisance will not occur and the highest water quality consistent with the maximum benefit to the People of the State be maintained. Resolution 68-16 is implemented consistent with the federal anti-degradation policy, 40 CFR 131.12.

43. The permitted discharge to surface water is consistent with the anti-degradation provisions of 40 CFR 131.12 and State Board Resolution No. 68-16. This Order provides for an increase in urban storm water discharges because of continuing development within the Discharger's jurisdiction. The continued revisions and implementation of the Port's SWMP in compliance with this Order, however, will reduce the potential for discharges from storm sewers to cause or contribute to the degradation of receiving water quality. This Order contains requirements to assure that the discharge does not exceed applicable water quality objectives and requires implementation of best management practices that are considered the best practicable treatment or control.

Storm Water Management Plan

- 44. Federal regulations (40 CFR 122.26(d)(2)(iv)) require that a storm water management program be implemented during the term of this Order. The Discharger shall demonstrate implementation of the SWMP and compliance with this Order through the information supplied in the Annual Reports.
- This Order requires evaluation of existing water quality impacts from storm water discharges; implementation of the Port's SWMP to reduce the discharge of pollutants from storm sewers to the MEP; reduce the discharge of pollutants from Discharger-operated industrial facilities to BAT/BCT; improvement of water quality; and protection of beneficial uses. The SWMP describes the framework for the management of storm sewer discharges during the five-year term of this Order; it also describes goals and objectives, legal authority, the source identification process, funding sources, fiscal analysis, the BMP evaluation and improvement process, performance standards, and a water quality monitoring plan.
- 46. The Discharger is required to establish performance standards for each BMP included in the SWMP. For structural and source control BMPs, the Discharger will provide estimates of the expected reduction of pollutant loads. These estimates will be used as performance standards where appropriate. If these estimates do not provide appropriate performance standards, the Discharger will propose alternative performance standards in its SWMP. For non-structural BMPs (e.g., business outreach and construction site inspection), the Discharger will propose performance standards that represent the designated level of effort required to comply with this Order and the federal MEP standard.
- 47. The SWMP and any Regional Board-approved revisions to it are integral and enforceable components of this Order.

Development Standards

48. On 5 October 2000, the State Board adopted Order WQ 2000-11, a precedential decision concerning the use of Standard Urban Storm Water Mitigation Plans (hereafter Development Standards) in municipal storm sewer permits for new development and significant redevelopment projects. The Development Standards were initially adopted by the Los Angeles Regional Water Quality Control Board to require treatment controls for new and significant redevelopment projects. The State Board recognized that the decision includes significant legal or policy determinations that are likely to recur (Gov. Code §11425.60). Because of the

precedent set by Order WQ 2000-11, the Regional Board's municipal storm sewer permits must be consistent with applicable portions of the State Board's decision and include Development Standards.

- 49. Federal regulations (40 CFR 131.10(a)) prohibit states from designating waste transport or waste assimilation as a use for any water of the United States. Authorizing the construction of a storm water/urban runoff treatment facility in a jurisdictional water body would be tantamount to accepting waste assimilation as an appropriate use for that water body. Furthermore, the construction and operation of a pollution control facility in a water body can impact the physical, chemical, and biological integrity as well as the beneficial uses of the water body. Therefore, storm water treatment and/or mitigation in accordance with Development Standards and any other requirements of this Order must occur prior to the discharge of storm water into a water of the United States.
- 50. Studies indicate that facilities with paved surfaces subject to frequent motor vehicle traffic (such as parking lots and fast food restaurants), or facilities that perform vehicle repair, maintenance, or fueling (automotive service facilities) are potential sources of pollutants in storm water [References: Pitt et al., Urban Storm Water Toxic Pollutants: Assessment, Sources, and Treatability, Water Environment Res., 67, 260 (1995); Results of Retail Gas Outlet and Commercial Parking Lot Storm Water Runoff Study, Western States Petroleum Association and American Petroleum Institute, (1994); Action Plan Demonstration Project, Demonstration of Gasoline Fueling Station Best Management Practices, Final Report, County of Sacramento (1993); Source Characterization, R. Pitt, In Innovative Urban Wet-Weather Flow Management Systems (2000) Technomic Press, Field, R et al. editors; Characteristics of Parking Lot Runoff Produced by Simulated Rainfall, L.L. Tiefenthaler et al. Technical Report 343, Southern California Coastal Water Research Project (2001)].

Impaired Water Bodies

- 51. CWA Section 303(d) and 40 CFR 130.7 require States to identify water quality-impaired water bodies and pollutants of concern and develop Total Maximum Daily Loads (TMDLs). A TMDL is a quantitative assessment of the total pollutant load that can be discharged from all sources and assimilated by a water body while still meeting water quality standards. The Regional Board is currently in the process of developing TMDLs for listed water bodies within the Region. Once the Regional Board and USEPA approve TMDLs, the Port's storm sewer discharges into impaired water bodies will be subject to waste load allocations. The Regional Board will take a separate action, outside of the approval of this Order, to establish the TMDLs and waste load allocations.
- 52. The Regional Board considers storm sewer discharges from the Stockton urbanized area to be significant sources of pollutants. Under Section 303(d) of the CWA, the Stockton Deep Water Channel (dioxin, furans, and PCBs), and San Joaquin River (boron, chlorpyrifos, DDT, diazinon, electrical conductivity, Group A pesticides, selenium, mercury, and unknown toxicity) are listed as water quality impaired by the pollutants shown in parentheses. In addition, low dissolved oxygen causes impairment in the river from Channel Point to Disappointment Slough and pathogens impair surface waters near the Port of Stockton Turning Basin. These impairments are

based on identified exceedances of water quality standards. Storm sewer discharges may contain waste constituents that contribute to the listed impairments. Monitoring these discharges for the listed parameters, including toxicity using bioassay testing, is appropriate.

- The Regional Board plans to address pollution in the 303(d) listed water bodies by developing TMDLs for the Stockton Deep Water Channel and San Joaquin River over the next decade. Once the Regional Board and U.S. EPA approve TMDLs, the Port's storm sewer discharges into impaired water bodies will be subject to load allocations established by TMDLs.
- 54. California Water Code Section 13263(a) requires waste discharge requirements to implement the Basin Plan. The Basin Plan contains numeric and narrative water quality objectives to protect the beneficial uses of surface water and groundwater. The Basin Plan contains the "Policy for Application of Water Quality Objectives" that specifies how the Regional Board will ensure compliance with narrative water quality objectives. That Policy states that the Regional Board will consider:

"relevant numerical criteria and guidelines developed and/or published by other agencies and organizations (e.g., California Department of Fish and Game, . . .). In considering such criteria, the Regional Board evaluates whether the specific numerical criteria, which are available through these sources and through other information supplied to the Regional Board, are relevant and appropriate to the situation at hand and, therefore, should be used in determining compliance with the narrative objective." (Basin Plan at IV-18.00.)

The Basin Plan contains a narrative toxicity objective that states: "All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life." (Basin Plan at III-8.00.)

Discharges regulated by this permit may contain organo-phosphorus pesticides including chlorpyrifos and diazinon. These pesticides cause toxicity in aquatic life. There are no California Toxics Rule or National Toxics Rule criteria for either of these pollutants. In March 2000, the California Department of Fish and Game (DFG) published acute and chronic criteria for these compounds applicable to fresh water aquatic life protection. DFG followed the approved US EPA Clean Water Act Section 304(a) guidance for deriving water quality criteria for the protection of aquatic organisms and their uses. Based on the Policy for Application of Water Quality Objectives, the Regional Board determined that it is relevant and appropriate to use the chlorpyrifos and diazinon criteria developed by the DFG to interpret attainment of the applicable narrative water quality objectives. The DFG criteria can be used to assess the effectiveness of the Discharger's pesticide reduction efforts and the phase out of diazinon and chlorpyrifos use. The California Department of Fish and Game criteria are: 80 nanograms per liter (ng/L or parts per trillion), one-hour average and 50 ng/L, four-day average for diazinon; 20 ng/L, one-hour average and 14 ng/L, four-day average for chlorpyrifos.

Public Process

55. The Regional Board has notified the Discharger and interested persons of its intent to prescribe waste discharge requirements for this discharge. These persons have been given an opportunity

to address the Regional Board at a public hearing and an opportunity to submit their written views and recommendations to the Regional Board.

- 56. The Regional Board has considered the information in the attached Fact Sheet, which is an informational part of this Order, in developing the Findings of this Order.
- 57. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.
- 58. This Order serves as an NPDES permit, pursuant to Section 402 of the CWA, and amendments thereto, and shall take effect 50 days from the date of the hearing, provided that USEPA has no objections.

IT IS HEREBY ORDERED that Order No. 97-042 is rescinded, and that the Discharger, its agents, successors and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

- 1. Discharges from storm sewers in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance (as defined in § 13050 of the California Water Code) in waters of the state are prohibited.
- 2. Discharges from storm sewers that cause or contribute to the violation of applicable water quality standards are prohibited.
- 3. Discharges from storm sewers containing pollutants that have not been reduced to the MEP are prohibited. Because activities at the Port are predominantly industrial, this Order defines the MEP discharge standard to be equivalent to BAT and BCT discharge standards that are typically established for industrial storm water discharges.
- 4. The Discharger shall effectively prohibit all types of non-storm water discharges into its storm sewer unless such discharges are either authorized by a separate NPDES permit or not prohibited in accordance with this Order.
- 5. The discharge of material by the Discharger associated with shipping, receiving and storage activities conducted at the Port, such as, but not limited to, sulfur, coal, cement, petroleum coke, raw sugar, copper concentrate, and fertilizers, to a surface water is prohibited. The Discharger will not be in violation of this prohibition if it demonstrates that the discharge has not caused or contributed to an exceedance of an applicable water quality standard, and that it has applied best management practices that reflect BAT/BCT to minimize or avoid such discharges.

- 6. Pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1), the following categories of non-storm water discharges need only be prohibited from entering a storm sewer if such categories of discharges are found to be sources of pollutants to waters of the United States:
 - a. Diverted stream flows
 - b. Rising ground waters, except for groundwater discharges from the West Complex reclamation ditches and groundwater cleanup sites
 - c. Uncontaminated ground water infiltration as defined by 40 CFR 35.2005(20)
 - d. Uncontaminated pumped ground water
 - e. Foundation drains
 - f. Springs
 - g. Water from crawl space pumps
 - h. Footing drains
 - i. Air conditioning condensation
 - j. Flows from riparian habitats and wetlands
 - k. Water line flushing
 - 1. Lawn and landscape irrigation
 - m. Planned and unplanned discharges from potable water sources
 - n. Irrigation water
 - o. De-chlorinated swimming pool water
 - p. Street wash water
- 7. When a non-storm water discharge category listed above is identified as a source of pollutants to waters of the State, the Discharger shall either:
 - a. Prohibit the discharge category from entering its storm sewer; or
 - b. Not prohibit the discharge category and implement, or require the responsible party(ies) to implement, BMPs that will reduce pollutants to the MEP; and
 - c. Submit the following information to the Regional Board for approval of the Executive Officer within 90 days upon identification of such discharge category:
 - i. The non-storm water discharge category listed above that the Discharger elects not to prohibit; and
 - ii. The BMPs for each discharge category listed above that the Discharger will implement, or require the responsible party(ies) to implement, to prevent or reduce pollutants to the MEP.
- 8. The Discharger shall examine dry weather analytical monitoring results collected in accordance with the Monitoring Program of this Order to identify water quality problems that may be the result of non-storm water discharge, including non-prohibited discharge categories. Follow-up investigations shall be conducted as necessary to identify and prohibit or control, as described above, any non-storm water discharges that are sources of

pollutants. Non-prohibited discharges listed above containing pollutants that cannot be reduced to the MEP by the implementation of BMPs shall be prohibited on a categorical or case-by-case basis.

9. Discharge of waste that could be released in concentrations exceeding applicable water quality objectives or that could reasonably be expected to affect beneficial uses of the waters of the state ('designated waste' per §13173 of the California Water Code) is prohibited. This prohibition includes runoff and leachate from sulfur, coal, petroleum coke, cement, raw sugar, copper concentrate, and fertilizers that have constituents that exceed water quality objectives or affect beneficial uses.

B. Receiving Water Limitations

1. Receiving water limitations are site-specific interpretations of water quality standards from applicable water quality control plans. As such, they are required as part of this Order. However, a receiving water condition not in conformance with the limitation is not necessarily a violation of this Order. The Regional Board may require an investigation to determine cause and culpability prior to asserting that a violation has occurred.

Discharges from the Port's storm sewers shall not cause or contribute to the following in the receiving water:

- a. Concentrations of dissolved oxygen to fall below 6.0 mg/l from 1 September through 30 November and 5.0 mg/l the remainder of the year.
- b. Oils, greases, waxes, or other materials to form a visible film or coating on the water surface or on the stream bottom.
- c. Oils, greases, waxes, floating material (liquids, solids, foams, and scums) or suspended material to create a nuisance or adversely affect beneficial uses.
- d. Chlorine to be detected in the receiving water in concentrations equal or greater than 0.01 mg/l.
- e. Aesthetically undesirable discoloration.
- f. Fungi, slimes, or other objectionable growths.
- g. The 30-day average for turbidity to increase as follows:
 - i. More than 1 Nephelometric Turbidity Units (NTUs) where natural turbidity is between 0 and 5 NTUs
 - ii. More than 20 percent where natural turbidity is between 5 and 50 NTUs.
 - iii. More than 10 NTUs where natural turbidity is between 50 and 100 NTUs.

- iv. More than 10 percent where natural turbidity is greater than 100 NTUs.
- h. The normal ambient pH to fall below 6.5, exceed 8.5, or change by more than 0.5 units.
- i. Deposition of material that causes nuisance or adversely affects beneficial uses.
- Taste or odor-producing substances to impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or to cause nuisance or adversely affect beneficial uses.
- k. Radionuclides to be present in concentrations that exceed maximum contaminant levels specified in the California Code of Regulations, Title 22; harm human, plant, animal or aquatic life; or result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
- 1. Aquatic communities and populations, including vertebrate, invertebrate, and plant species, to be degraded.
- m. Toxic pollutants to be present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses; produce detrimental response in human, plant, animal, or aquatic life; or bioaccumulate in aquatic resources at levels harmful to human health.
- n. Pathogen concentrations to be present that exceed criteria or threaten public health.
- o. Violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Board pursuant to the CWA and regulations adopted there under.
- p. The receiving water temperature to increase more than five °F.
- 2. Except as specified in Receiving Water Limitation B.3, the Discharger shall comply with Discharge Prohibition A.2 and Receiving Water Limitation B.1 through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with the SWMP and other requirements of this Order, including any modifications. The SWMP shall be designed to achieve compliance with Receiving Water Limitation B.1. If exceedance(s) of water quality objectives or water quality standards (collectively, WQS) persist notwithstanding implementation of the SWMP and other requirements of this Order, the Discharger shall assure compliance with Discharge Prohibition A.2 and Receiving Water Limitation B.1 by complying with the following procedure:
 - a. Upon a determination by either the Discharger or Regional Board that discharges are causing or contributing to an exceedance of an applicable WQS, the Discharger shall submit a report to the Regional Board that describes BMPs that are currently being

implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of WQSs. This report of water quality exceedance (RWQE) shall be incorporated in the Annual Report unless the Regional Board directs an earlier submittal. The RWQE shall include proposed revisions to the SWMP and an implementation schedule for new or improved BMPs, if applicable. The Regional Board may require modifications to the RWQE.

- b. The Discharger shall submit any modifications to the RWQE required by the Regional Board within **30 days** of notification.
- c. Within **30 days** following approval of the RWQE by the Regional Board, the Discharger shall revise the SWMP and their monitoring program to incorporate the approved modified BMPs that have been and will be implemented, implementation schedule, and any additional monitoring required.
- d. The Discharger shall implement the revised SWMP and monitoring program in accordance with the approved schedule.

So long as the Discharger has complied with the procedures set forth above and are implementing the revised SWMP, the Discharger does not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless directed by the Regional Board to develop additional BMPs.

- 3. For those industrial facilities described in Findings 38 and 39 (i.e., those industrial facilities that are required by U.S. Environmental Protection Agency regulations to obtain an industrial storm water permit as listed in the General Industrial Permit), the Discharger shall comply with Receiving Water Limitation B.1 as follows:
 - a. Upon a determination, by either the Discharger or Regional Board, that discharges are causing or contributing to an exceedance of an applicable WQS, the Discharger shall submit a report to the Regional Board that describes BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of WQSs. This report of water quality exceedance (RWQE) shall be incorporated in the Annual Report unless the Regional Board directs an earlier submittal. The RWQE shall include proposed revisions to the SWMP and an implementation schedule for new or improved BMPs, if applicable. The Regional Board may require modifications to the RWQE.
 - b. The Discharger shall submit any modifications to the RWQE required by the Regional Board within **30 days** of notification.
 - c. Within **30 days** following approval of the RWQE by the Regional Board, the Discharger shall revise its SWMP and monitoring program to incorporate approved modified BMPs that have been and will be implemented, implementation schedule, and any additional monitoring required.

- d. The Discharger shall implement the revised SWMP and monitoring program in accordance with the approved schedule.
- e. Nothing in this section shall prevent the Regional Board from enforcing any provisions of this Order while the Discharger prepares and implements the above report.

C. Provisions

1. The Discharger shall revise its SWMP to address the requirements of this Order, and submit the revised SWMP by **1 March 2005** for public review and comment, and Regional Board approval. New or revised BMPs may be based upon studies or other activities conducted by the Discharger, literature review, or studies conducted by other programs or dischargers. The SWMP shall include the rationale for any new or modified BMPs, an implementation schedule containing identifiable milestones, performance standards, and a compliance monitoring and reporting program.

The Discharger shall incorporate newly developed or modified BMPs and performance standards into applicable annual revisions to the SWMP. The Discharger shall implement performance standards and BMPs in the approved SWMP to ensure that pollutant discharges from its storm sewer are reduced to the MEP. The approved SWMP shall serve as the framework for identification, assignment, and implementation of BMPs. The Discharger shall implement a SWMP containing the following elements:

- Construction
- Commercial/Industrial
- Municipal operations
- Illicit discharge detection and elimination
- Development standards
- Monitoring and Reporting
- Performance and effectiveness evaluation
- 2. The Discharger shall secure the resources necessary to meet the requirements of this Order. In order to demonstrate sufficient financial resources, the Discharger shall include a budget summary in its Annual Work Plan. This summary shall identify the storm water budget for the applicable fiscal year, using estimated percentages and written explanations, where necessary, to implement the SWMP elements required by this Order.
- 3. The Discharger shall establish, maintain and enforce adequate legal authority to control pollutant discharges from its storm sewer through tenant agreement or similar means. This legal authority must, at a minimum, authorize the Discharger to:
 - a. Control the contribution of pollutants in discharges of runoff associated with industrial and construction activities to its storm sewer. This requirement applies to industrial and construction sites covered under the statewide general industrial or construction storm water permits as well as to those sites that do not require permit coverage;

- b. Prohibit unauthorized non-storm water discharges where pollutants have not been reduced to the MEP, including but not limited to the following:
 - i. Sanitary sewage overflows;
 - ii. Discharges of wash water resulting from the hosing off or cleaning of gas stations, vehicle repair services, or other types of automotive service facilities;
 - iii. Discharges resulting from the storage, cleaning, repair, or maintenance of any type of equipment, machinery, or facility including, but not limited to, motor vehicles, cement-related equipment, and portable toilet servicing;
 - iv. Discharges of wash water from mobile operations including, but not limited to, mobile vehicle washing, steam cleaning, power washing, and carpet cleaning;
 - v. Discharges of wash water from the cleaning of impervious surfaces in municipal, industrial and commercial areas including, but not limited to, parking lots, streets, sidewalks, driveways, patios, work yards and outdoor eating or drinking areas;
 - vi. Discharges of runoff from material storage areas containing chemicals, fuels, grease, oil, or other hazardous materials;
 - vii. Discharges of sediment, pet waste, vegetation clippings, or other landscape or construction-related wastes;
 - viii. Discharges of food-related wastes (e.g., grease, and restaurant kitchen mat and trash bin wash water);
 - ix. Discharge of runoff from washing toxic materials from paved or unpaved areas; and
 - x. Discharge of materials such as litter, landscape debris, construction debris, or any state or federally banned pesticides.
- c. Prohibit and eliminate illicit connections to the storm sewer;
- d. Prohibit the discharge of spills, dumping, or disposal of materials other than storm water to its storm sewer;
- e. Use enforcement mechanisms to attain compliance with the Discharger's tenant agreements. The Discharger shall obtain authority to enter, sample, inspect, and review and copy records from any site discharging into the Port's storm sewer;

- f. Control the contribution of pollutants from one portion of the shared storm sewer to another portion of the storm sewer through agreements between the Discharger and the City of Stockton;
- g. Carry out all inspections, surveillance, and monitoring necessary to determine compliance and noncompliance with tenant agreements, including the prohibition of illegal discharges to the storm sewer;
- h. Require the use of BMPs to prevent or reduce the discharge of pollutants to the storm sewer to the MEP; and
- i. Require that treatment control BMPs be properly operated and maintained.
- 4. The Discharger shall amend and adopt a specific standardized lease agreement to enforce the requirements of this Order. The tenant agreement, which shall be in place by **1 March 2005**, shall contain a progressive enforcement procedure.
- 5. The Discharger shall complete the following program management tasks to ensure that the SWMP's elements are implemented on schedule and in compliance with this Order:
 - a. **Annual Work Plan:** The Discharger shall submit an Annual Work Plan by **1 April** of each year. The Annual Work Plan shall list proposed activities for the upcoming fiscal year beginning 1 July of the current year and ending 30 June the following year.
 - b. **Annual Report:** The Discharger shall submit an Annual Report by **1 September** of each year. Requirements for the Annual Report are provided in the Monitoring and Reporting Program for this Order.
 - c. **SWMP Revision:** The Port's SWMP will require revision to bring it into compliance with the provisions of this Order. The SWMP may also require periodic revision in response to a change in conditions and to incorporate more effective approaches to pollution control. Proposed SWMP revisions, which shall be part of the annual review process, shall be presented with the Annual Reports. In addition, and as warranted by revisions of this Order, the Discharger shall revise its SWMP to comply with regional or watershed-specific requirements, or waste load allocations developed and approved pursuant to the process for the designation and implementation of TMDLs for impaired water bodies. Significant SWMP revisions shall be brought before the Regional Board for approval. Minor SWMP revisions may be approved by the Executive Officer following a 30-day public comment period.
 - d. **SWMP Implementation:** The Discharger shall commence full implementation of the requirements of its SWMP upon approval of the revised SWMP by the Regional Board.
- 6. The Discharger shall incorporate Hydrology and Water Quality Mitigation Measures 4.7.1 through 4.7.9 from the final EIR for development of the West Complex (dated May 2004) into the revised SWMP, as specified in Attachment C, incorporated herein by reference.

Some of these mitigation measures (e.g., erosion and sediment controls for construction of new facilities) are already addressed by the provisions of this Order, but other measures (e.g., assessment of the wastewater conveyance system) are not.

- 7. The Discharger shall implement the Construction Element of its SWMP to reduce pollution discharges from construction sites to the MEP. At a minimum, the Construction Element shall address the following:
 - a. Pollution prevention
 - b. Source identification
 - c. BMP implementation
 - d. Construction site inspections
 - e. Enforcement measures
 - f. Reporting of non-compliant sites
 - g. Education outreach for construction site operators

Additional Construction Element requirements are presented below.

- a. The Discharger shall implement a program to control pollution discharges from all construction sites, regardless of size, within its jurisdiction. The program shall ensure that the following requirements are implemented:
 - i. Prior to approving new construction with one acre or greater disturbed area, require submittal of a Storm Water Pollution Prevention Plan (SWPPP) containing, at a minimum, the following:
 - a) A certification that a Notice of Intent has been submitted to the State Board;
 - b) A vicinity map showing nearby roadways, the construction site perimeter, and the geographic features and general topography surrounding the site;
 - c) A site map showing the construction project in detail, including the existing and planned paved areas and buildings; general topography both before and after construction; drainage patterns across the project area; and anticipated storm water discharge locations (i.e., the receiving water, a conduit to receiving water or drain inlets);
 - d) A detailed, site-specific listing of the potential sources of storm water pollution;
 - e) A description of the type and location of erosion and sediment control BMPs to be employed at the site;
 - f) The name and telephone number of the qualified person responsible for implementing the SWPPP; and

- g) Certification/signature by the tenant or an authorized representative.
- ii. The Discharger shall inspect construction sites for compliance with its tenant agreement at least **once every two** weeks during the wet season (i.e., October thru April), and **once a month** during the remaining months, until construction is terminated. These inspections shall ensure the following:
 - a) Sediments generated at the project site are retained using adequate source control and structural BMPs;
 - b) Construction-related materials and wastes are retained at the project site to avoid discharge to the storm sewer and waters of the state;
 - c) Unauthorized non-storm water runoff is contained at the project site; and
 - d) Erosion from slopes and channels are controlled by implementing an effective combination of erosion and sediment control BMPs, such as limiting grading during the wet season; inspecting graded areas during rain events; planting and maintenance of vegetation on slopes; and covering slopes susceptible to erosion.
- iii. The Discharger shall ensure that construction site inspectors receive adequate training regarding the requirements of this Order.
- 8. The Discharger shall require implementation of pollution reduction and control measures at commercial and industrial facilities to effectively prohibit unauthorized non-storm water discharges and to reduce pollutants in storm water runoff to the MEP. Except as specified in other sections of this Order, pollution reduction and control measures can be used alone or in combination, and can include structural and source control BMPs, and operation and maintenance procedures, which can be applied before, during, or after pollution generating activities. At a minimum, the Commercial/Industrial Element shall include requirements to: (1) track, (2) inspect, and (3) ensure compliance with the Discharger's tenant agreements at commercial and industrial facilities.
 - a. Track potential pollution sources
 - i. The Discharger shall develop and submit, as part of its revised SWMP, an inventory of businesses and industries currently operating at the Port. The inventory shall include the following minimum fields of information for each commercial or industrial facility:
 - a) Site address of business, and name and address of business owner and operator;
 - b) Whether or not the site is covered under the General Industrial Permit; and

- c) Narrative description of business activities, and the SIC code that best reflects the type of business.
- b. Commercial/Industrial inspection and outreach
 - i. The Discharger shall inspect and conduct business outreach at commercial/industrial facilities **once per year** beginning **1 July 2005**.
 - ii. The Discharger need not perform additional inspections and outreach at commercial/industrial facilities that it has determined to have no pollution exposure to storm water, and no potential for unauthorized non-storm water discharges; however, the Discharger shall continue to track these facilities, noting in its inventory the determination to discontinue inspections and outreach. The Discharger shall not halt inspections at any facilities covered under the General Industrial Permit.
 - iii. Inspection and outreach of commercial/industrial facilities shall be designed and conducted to ensure the following:
 - The facility operator has been made aware of storm water pollution prevention requirements and the consequences of non-compliance;
 - The facility operator is in compliance with the Discharger's tenant agreement;
 - The potential for discharge of pollutants in storm water is reduced to the MEP; sources to be inspected may include industrial processes; equipment and vehicle maintenance and storage; equipment, vehicle, and surface washing; raw material and product handling and storage; solid waste handling and storage; and hazardous waste handling and storage;
 - Unauthorized non-storm water discharges do not occur at the facility; and
 - Illicit connections are not present at the facility.
 - iv. The Discharger shall update its business inventory at least annually and include the updated inventory in the Annual Report.
- c. Ensure commercial/industrial facility compliance through the following:
 - i. **BMP Implementation**: The Discharger shall require, through tenant agreement or other means, that facilities control pollution discharges to, and eliminate unauthorized non-storm water discharges to, the storm sewer. The Discharger shall offer BMP guidance to dischargers upon request; however, the Regional Board recognizes that the selection of specific BMPs to be implemented is the responsibility of the discharger.

- ii. **Progressive Enforcement**: The Discharger shall implement a progressive enforcement policy to ensure that facilities are brought into compliance with the Discharger's tenant agreement within a reasonable period as specified below.
 - a) In the event that the Discharger determines, based on an inspection conducted above, that a facility operator has failed to control pollution discharges to the storm sewer, it shall take progressive enforcement action that, at a minimum, shall include a follow-up inspection within two weeks of the date of the initial inspection.
 - b) In the event that the Discharger determines that a facility operator has failed to control sources of pollution discharges to the storm sewer after a follow-up inspection, the Discharger shall take further enforcement action as established through authority in its tenant agreement.
 - c) The Discharger shall maintain records, including inspection reports, warning letters, notices of violation, and other enforcement records, demonstrating a good faith effort to bring facilities into compliance with applicable requirements.

iii. Coordination with the Regional Board

- a) The Discharger shall provide the Regional Board with a copy of any notices of violation that facilities receive for pollution discharges to the Port's storm sewer system.
- b) The Discharger shall initiate, within two business days, investigation of complaints transmitted by the Regional Board regarding facilities within its jurisdiction. The initial investigation shall include, at a minimum, a limited inspection of the facility to investigate the complaint and determine if the facility is out of compliance with the Discharger's tenant agreement.
- c) As directed by the Executive Officer, the Discharger shall support Regional Board enforcement actions by assisting in identification of current tenants of facilities; providing staff, when available and as appropriate, for joint inspections with Regional Board inspectors; appearing as witnesses in Regional Board enforcement hearings; and providing copies of inspection reports and other progressive enforcement documentation.

d. Ship docking inspection and outreach

i. The Discharger shall conduct outreach to ensure its client ship operators are aware of international agreements on (1) the requirement to intake ballast water in pelagic waters only; and (2) the prevention, to the maximum extent practicable, of the discharge of ballast water to waters of the State.

- ii. The Discharger shall conduct outreach to its client ship operators to ensure they know that the discharge of pollution, including vessel equipment wash water and deck wash-down water, to waters of the State is prohibited.
- iii. The Discharger shall monitor ship cargo loading and unloading to prevent, to the MEP, ship operators from discharging pollution to waters of the State.
- 9. The Discharger shall implement a Municipal Operations Program to prevent or reduce pollutants in runoff from all of its land use area, facilities, and activities. At a minimum the Municipal Operations Program shall consist of:

a. Industrial Site Inspection

The Discharger shall conduct monthly inspections in areas within its jurisdiction that would otherwise be covered under the General Industrial Permit³ (note that these areas are covered under this Order in lieu of the General Industrial Permit). The purpose of these inspections shall be to find and eliminate, through implementation of BMPs, potential sources of pollution for urban runoff. The Port's SWMP shall include a map of areas subject to these inspections, a proposed inspection form, and a description of a procedure to timely address any potential sources of pollution identified by the inspections.

b. Dock Loading and Unloading Activities Management

The Discharger shall implement BMPs to prevent or minimize the direct discharge of materials associated with shipping, receiving and storage activities at its docks.

c. Sanitary Sewer System Maintenance, Overflow, and Spill Prevention

The Discharger shall implement a response plan for overflows of its sanitary sewer system that consists of at least the following:

- i. Procedures to identify, repair, and remediate sanitary sewer blockages, exfiltration, and overflow from sanitary sewers to the storm sewer;
- ii. Investigation of any complaints received;
- iii. Upon notification, immediate response to overflows for containment; and
- iv. Notification to appropriate sewer and public health agencies when a sanitary sewer overflows to the storm sewer.

³ This inspection requirement does not apply to tenant-occupied sites that are covered under the General Industrial Permit. The Port's inspection of these sites is addressed in Provision C.8 of this Order.

d. Port Construction Activities Management

At its own construction sites, the Discharger shall (1) implement the Construction Element requirements; (2) obtain coverage under the General Construction Permit for applicable public construction sites; and (3) implement the Development Standard requirements (see below) as they apply to applicable Port projects.

e. Vehicle Maintenance/Material Storage Facilities/Corporation Yards Management

- i. The Discharger shall implement BMPs to minimize pollution discharges in urban runoff, including but not limited to good housekeeping practices, material storage control, vehicle leak and spill control, and illicit discharge control.
- ii. The Discharger shall implement the following measures to prevent the discharge of pollution to storm sewers:
 - a) For existing facilities that are not already plumbed to the sanitary sewer, vehicle and equipment wash areas shall either be self-contained; equipped with a clarifier; equipped with an alternative pre-treatment device; or plumbed to the sanitary sewer.
 - b) For new facilities, or during significant redevelopment of existing facilities, vehicle and equipment wash areas shall be plumbed to the sanitary sewer and, if necessary, equipped with a pre-treatment device in accordance with the requirements of the sewer agency.

f. Landscape and Recreational Facilities Management

The Discharger shall prepare and implement a standardized protocol for routine and non-routine application of pesticides, herbicides (including pre-emergents), and fertilizers that:

- i. Is consistent with the State Board's guidelines and monitoring requirements for application of aquatic pesticides to surface waters (WQ Order No. 2001-12 DWQ);
- ii. Implements requirements and procedures prohibiting application of pesticides or fertilizers immediately before, during, or immediately after a predicted rain event or when water is flowing off the application area;
- iii. Implements requirements and procedures prohibiting application or storage of banned or unregistered pesticides;
- Requires that staff applying pesticides are licensed by the California Department of Pesticide Regulation, or under the direct supervision of a certified pesticide applicator;

- v. Implements procedures to encourage planting of native vegetation and reduces water, fertilizer, and pesticide needs;
- vi. Requires the storage of fertilizers and pesticides indoors or under cover on paved surfaces or use of secondary containment;
- vii. Minimizes the use, storage, and handling of hazardous materials to reduce the potential for spills; and
- viii. Requires the regular inspection of pesticide and fertilizer storage areas.

g. Storm Drain Operation and Maintenance

- i. The Discharger shall stencil or label (e.g., "No Dumping Drains to River") drain inlets within its jurisdiction. Legible stenciling at 95 percent of its drain inlets at the end of the term of this Order shall be deemed to be in compliance with this requirement.
- ii. The Discharger's revised SWMP shall include maintenance procedures for catch basins and sumps, including the following:
 - Prioritizing catch basins and sumps for cleaning based on accumulation of waste and presence or absence of downstream BMPs;
 - An inspection and cleaning schedule for removal of accumulated waste (e.g., sediment, trash, debris, and other pollutants) based on prioritization effort. At a minimum, cleaning of prioritized catch basins and sumps shall occur prior to the rainy season;
 - Record keeping of cleaning and overall quantity of waste removed;
 - Proper disposal of waste removed pursuant to applicable laws; and
 - Measures to eliminate waste discharges during storm sewer maintenance and cleaning activities.
- iii. The Discharger shall implement BMPs for storm drain maintenance that include:
 - a) A program to visually monitor Discharger-owned open channels and associated drainage structures for debris at least annually before the wet weather season (October 1); clean as needed based on visual inspections; and identify and prioritize problem areas of illicit discharge for additional inspections;
 - b) A review of current maintenance activities to ensure that appropriate storm water BMPs are being used to protect water quality;
 - c) Minimize the discharge of pollutants during storm sewer maintenance and clean outs:

- d) Proper disposal of material removed; and
- e) Record keeping for cleaning and maintenance of open channels and associated drainage structures.

h. Streets and Roads Maintenance

- i. As part of its revised SWMP, the Discharger shall designate appropriate sweeping frequencies for streets, material handling and storage areas, and docks within its jurisdiction.
- ii. The Discharger shall ensure that wash water from street sweeping and street sweeper rinse out is not discharged to the storm sewer.
- iii. The Discharger shall review and revise its maintenance practices to include the following:
 - a) Sawcutting wastes shall be recovered and disposed of properly and that in no case shall waste be left on a roadway or allowed to enter the storm sewer;
 - b) Concrete and other street and road maintenance materials and wastes shall be managed to prevent discharge to the storm sewer; and
 - c) Concrete truck and chute washout shall only occur in designated areas; concrete rinse shall not be discharged to the storm sewer, open ditches, or streets.
- iv. The Discharger shall provide annual training, commencing by **1 March 2005**, for its employees in targeted positions (whose interactions, jobs, and activities may affect storm water quality) regarding the requirements of the SWMP, and to (1) promote a clear understanding of the potential for maintenance activities to pollute storm water, and (2) identify and select appropriate BMPs.

i. Retention Basin Operation and Maintenance

The Discharger shall prepare and implement guidelines for operating and maintaining retention basins within its jurisdiction. These guidelines shall consider, at a minimum, the following: (1) inspection frequency; (2) maintenance frequency for removal of accumulated sediment and debris; and (3) maintenance and stabilization of basin side slopes to prevent erosion and incorporation of additional sediment into outflow.

If a retention basin inspection finds evidence of berm seepage, the Discharger shall notify the Regional Board within two weeks.

j. Parking Facilities Management

The Discharger shall propose parking facility inspection and maintenance requirements in its SWMP for Discharger-owned parking lots exposed to rainfall. The proposed requirements shall include categories of parking facilities and corresponding inspection and maintenance frequencies to prevent the buildup of debris and excessive oil to the MEP

k. Emergency Procedures

The Discharger shall repair its infrastructure in a manner that minimizes environmental damage in emergency situations such as earthquakes, fires, or floods. BMPs shall be implemented to the extent that measures do not compromise public health and safety. After initial emergency response or emergency repair activities have been completed, the Discharger shall implement BMPs and programs as required by this Order.

10. Illicit Discharge Detection and Elimination Program:

- a. The Discharger shall implement an Illicit Discharge Detection and Elimination Program containing measures to identify, report, and eliminate illicit discharges and connections. The Illicit Discharge Detection and Elimination Program shall address:
 - i. Review of applicable dry weather analytical monitoring data
 - ii. Investigation/inspection and follow-up procedures
 - iii. Elimination of discovered illicit discharges and connections
 - iv. Enforcement against parties responsible for illicit discharges
 - v. Response, containment, and cleanup procedures for spills (including sewage spills from private laterals)
 - vi. Appropriate disposal of used oil and toxic materials
 - vii. Elimination of discovered incidents of infiltration from sanitary sewer to storm sewers.
- b. The Discharger shall list the discovery and resolution of any illicit discharges (including illicit connections) in the Annual Reports.
- c. **Training:** By **1 March 2005** and annually thereafter, the Discharger shall train targeted employees who are responsible for identification, investigation, termination, cleanup, and reporting of illicit connections and other illicit discharges.

d. Illicit Connections

i. The Discharger shall conduct dry weather field screening of its storm sewer system to detect illicit connections. To this end, the Discharger shall submit a field screening work plan to the Regional Board by 1 April 2005, with field screening of open channels and appropriate underground pipes being completed by 1 October 2006.

ii. Response to Illicit Connections

- a) Upon discovery or upon receiving a report of a suspected illicit connection, the Discharger shall initiate an investigation within two weeks to determine the source of the connection, the nature and volume of discharge through the connection, and the responsible party for the connection.
- b) Upon confirmation of the illicit nature of a storm drain connection, the Discharger shall ensure termination of the connection within 45 days, using enforcement authority as needed.

e. Illicit Discharges

- i. For illicit discharges that are known or suspected to contain hazardous substances (as defined by California law), the Discharger shall respond, within one business day of discovery or a report of a suspected illicit discharge, with activities to abate, contain, and clean up such illicit discharges. For illicit discharges not known or suspected to contain hazardous substances, the Discharger shall respond within two days of discovery or report, and at a minimum require the identified responsible party(ies) to immediately cease such discharges.
- ii. The Discharger shall perform follow up investigations of illicit discharges as soon as practicable, and take enforcement action as appropriate.
- 11. The Discharger shall minimize the short- and long-term impacts on receiving water quality from new development and significant redevelopment. In order to reduce pollutants in runoff flows from these sources to the MEP, the Discharger shall perform the following:
 - a. Incorporate water quality and watershed protection principles into planning procedures and policies, which shall consider the following:
 - i. Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and use on-site infiltration of runoff in areas with appropriate soils where the infiltration of storm water would not pose a potential threat to groundwater quality.
 - ii. Preserve and, where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands and buffer zones.
 - iii. Limit disturbances of natural water bodies and natural drainage systems caused by development, including roads, highways, and bridges.
 - iv. Use existing drainage master plans or studies to estimate increases in pollutant loads and flows resulting from projected future development and require

incorporation of structural and non-structural BMPs to mitigate the projected increases in pollutant loads in runoff.

- v. Implement source or treatment controls as necessary to protect downstream receiving water quality from increased pollutant loads in runoff flows from new development and significant redevelopment.
- vi. Control the post-development peak storm water run-off discharge rates and velocities to prevent or reduce downstream erosion, and to protect stream habitat.
- b. Prior to project approval and issuance of local permits for new development and significant redevelopment, the Discharger shall review the proposed project plan and require measures to ensure that all development is in compliance with the Discharger's tenant agreements and other applicable requirements.
- 12. By **1 March 2005**, the Discharger shall develop and submit for Executive Officer approval a **Development Standards Plan (DSP)** which describes measures to reduce pollution discharges to the MEP from all new development and significant redevelopment projects.
- 13. Within three months of approval of the DSP, the Discharger shall implement its Development Standards, and amend its tenant agreements as needed.
- 14. Upon adoption of Development Standards, the Discharger shall ensure that all new development and significant redevelopment projects falling under the priority project categories listed below are reviewed and conditioned for compliance with the Development Standards.
 - a. **Priority Development Project Categories**: Development Standards requirements shall apply to all new development and significant redevelopment projects falling under the priority project categories listed below. The term "significant redevelopment" is defined as the creation or addition of at least 5,000 square feet of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to expansion of a building footprint, or replacement of a structure; replacement of impervious surface that is not part of a routine maintenance activity; and land-disturbing activities related to structural or impervious surfaces. Where significant redevelopment results in an increase of less than 50 percent of the impervious surfaces of a previously existing development, and the existing development was not subject to Development Standards, the BMP design standards discussed below apply only to the addition, and not to the entire development. Priority Development Project Categories are listed below.
 - i. Home subdivisions with ten housing units or more. This category includes single-family homes, multi-family homes, condominiums, and apartments.
 - ii. Commercial developments. This category is defined as any development on private land that is not for heavy industrial or residential uses where the impervious

land area for development 100,000 square feet or more. The category includes, but is not limited to hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, commercial nurseries, car wash facilities, minimalls and other business complexes, shopping malls, hotels, office buildings, public warehouses, and other light industrial facilities.

- iii. Automotive repair shops. This category is defined as a facility that is categorized by one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539, where the total impervious area for development is 5,000 square feet or more.
- iv. Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812) and has 5,000 or more feet of impervious area.
- v. Parking lots exposed to rainfall that are 5,000 square feet or more, or with 25 or more parking spaces. This category is defined as an uncovered impervious area for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.
- vi. Street, roads, highways, and freeways. This category includes any paved surface five acres or greater used by automobiles, trucks, motorcycles, and other vehicles.
- vii. Gasoline Outlets. "Gasoline Outlet" is defined as any facility engaged in dispensing gasoline with 5,000 square feet or more of impervious surface area.
- b. BMP Requirements: The Development Standards Plan shall include a list of recommended source and/or structural treatment control BMPs for all new development and significant redevelopment projects falling under the above priority project categories or locations. At a minimum, Gasoline Outlets shall be required to use the BMPs listed in the California Storm Water Quality Task Force, March 1997 BMP Guide for Retail Gasoline Outlets.
- c. Numeric Sizing Criteria: As a part of the DSP, the Discharger shall develop numeric sizing criteria for structural treatment BMPs using the following numeric sizing criteria:
 - i. Volume-based BMPs shall be designed to mitigate (infiltrate or treat) either:
 - a) The volume of runoff produced from a 24-hour 85th percentile storm event, as determined from the local historical rainfall record; or
 - b) The volume of runoff produced by the 85th percentile 24-hour rainfall event, determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998); or

- c) The volume of annual runoff based on unit basin storage volume, to achieve 80 percent or more volume treatment by the method recommended in California Storm Water Best Management Practices Handbook Industrial/Commercial, (1993).
- ii. Flow-based BMPs shall be designed to mitigate (infiltrate or treat) either:
 - a) The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two; or
 - b) The maximum flow rate of runoff, as determined from local historical rainfall records, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two.
- d. Equivalent Numeric Sizing Criteria: The Discharger may develop or use any equivalent numeric sizing criteria or performance-based standard for post-construction structural treatment BMPs as part of these requirements. Such equivalent sizing criteria may be authorized for use in place of the above criteria. In the absence of an equivalent numeric sizing criteria, the criteria contained above shall be implemented.
- e. Pollutants and Activities of Concern: The DSP shall consider pollutants of concern or activities of concern in identifying appropriate BMPs for new development or significant redevelopment projects. In selecting BMPs, the following shall be considered: (1) the target pollutants; (2) land use and pollutants associated with that land use type; (3) pollutants expected to be present on site at concentrations that would pose potential water quality concerns; and (4) changes in flow rates and volumes resulting from the development project and sensitivity of receiving waters to changes in flow rates and volumes.
- f. Implementation Process: The DSP shall describe the process used to implement the Development Standards and all proposed modifications to the process. The process shall also include identification of the roles and responsibilities of various municipal departments in implementing these standards, as well as any other measures necessary for the implementation of these standards.
- g. Infiltration and Groundwater Protection: To protect groundwater quality, the Discharger shall apply restrictions on the use of structural BMPs designed to primarily function as infiltration devices (such as infiltration trenches and infiltration basins). Such restrictions shall ensure that the use of such infiltration structural treatment BMPs shall not cause a violation of applicable groundwater quality standards.
- h. Downstream Erosion: The DSP shall include any existing criteria or proposed modifications to ensure that discharges from new development and significant

redevelopment address the potential for downstream erosion and protect stream habitat. At a minimum, the Port's Development Standards process shall consider the need for measures to control peak storm water discharge rates and velocities in order to protect downstream erosion and stream habitat. Storm water discharge volumes and durations should also be considered in the Development Standards.

- 15. The Discharger may apply to the Executive Officer for approval of a regional or subregional storm water mitigation program to substitute in part or wholly for Development Standard requirements. Upon review and a determination by the Executive Officer that the proposal is technically valid and appropriate, the Executive Officer may consider for approval such a program if its implementation will:
 - a. Result in equivalent or improved storm water quality;
 - b. Protect aquatic habitat;
 - c. Promote cooperative problem solving by diverse interests;
 - d. Be fiscally sustainable via secured funding; and
 - e. Be completed in five years, including the construction and start-up of treatment facilities.

Nothing in this provision shall be construed as to delay the implementation of Development Standard requirements as required by this Order.

- 16. The Discharger shall comply with Monitoring and Reporting Program No. R5-2004-0136, which is part of this Order, and any revisions thereto approved by the Regional Board. Because the Discharger operates facilities that discharge waste subject to this Order, a Monitoring and Reporting Program is necessary to ensure compliance with waste discharge requirements.
- 17. The Discharger shall conduct an annual performance and effectiveness evaluation of its SWMP. This evaluation, which shall be presented in the Annual Reports, shall address specific direct and indirect measurements that the Discharger will use to track the long-term progress of its SWMP towards achieving improvements in receiving water quality. Direct and indirect measures of effectiveness shall include, but are not limited to, conformance with established performance standards, quantitative monitoring to assess the effectiveness of control measures, measurements or estimates of pollutant load reductions or increases, detailed accounting of SWMP accomplishments, and funds expended or staff hours used. In order to complete this assessment, the Discharger shall propose performance standards for BMPs included in its SWMP.

Methods to improve effectiveness in the implementation of tasks and activities including development of new, or modification of existing BMPs and performance standards, shall be identified through the SWMP effectiveness evaluation. Annual Reports shall also include a compliance status update that summarizes the Discharger's compliance with this Order and the elements of the SWMP.

- 18. The Discharger shall incorporate into its CEQA process, within 180 days of the effective date of this Order, procedures for considering potential storm water quality impacts and providing for appropriate mitigation when preparing and reviewing CEQA documents. The procedures shall require consideration of the following:
 - a. Potential impact of project construction on storm water runoff;
 - b. Potential impact of project post-construction activity on storm water runoff;
 - c. Potential for discharge of storm water from material storage areas, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas;
 - d. Potential for discharge of storm water to impair the beneficial uses of the receiving waters or areas that provide water quality benefit;
 - e. Potential for the discharge of storm water to cause significant harm on the biological integrity of the waterways and water bodies;
 - f. Potential for significant changes in the flow velocity or volume of storm water runoff that can cause environmental harm; and
 - g. Potential for significant increases in erosion of the project site or surrounding areas.
- 19. All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geological sciences, shall be prepared by, or under the direction of, persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1. To demonstrate compliance with section 415 and 3065 of Title 16, CCR, technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.
- 20. This Order may be modified or alternatively revoked or reissued prior to the expiration date as follows: (1) to address a significant change in conditions identified in technical reports required by the Regional Board that was unknown at the time of the issuance of this Order; (2) to incorporate applicable requirements of statewide water quality control plans adopted by the State Board or amendments to the Basin Plan approved by the State Board; (3) to incorporate applicable requirements of future State Board orders, or (4) to comply with any applicable requirements, guidelines, or regulations issued or approved under Section 402(p) of the CWA, if the requirement, guideline, or regulation so issued or approved contains different conditions or additional requirements not provided for in this Order. The Order as modified or reissued under this paragraph shall also contain any other requirement of the CWA when applicable.
- 21. The Discharger shall comply with all applicable items of the "Standard Provisions and monitoring Requirements for Waste Discharge Requirements (NPDES)," dated 1 March 1991, which is part of this Order. This attachment and its individual paragraphs are referred to as "Standard Provisions."

22. This Order expires on 15 October 2009. The Discharger must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for reissuance of waste discharge requirements.

I, THOMAS R. PINKOS, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Central Valley Region, on Friday, 15 October 2004.

THOMAS R. PINKOS, Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

ORDER NO. R5-2004-0136

NPDES NO. CAS0084077

MONITORING AND REPORTING PROGRAM
FOR
STOCKTON PORT DISTRICT
FACILITY-WIDE STORM WATER DISCHARGES FROM
MUNICIPAL SEPARATE STORM SEWER SYSTEM AND
NON-STORM WATER DISCHARGES FROM THE PORT OF STOCKTON
SAN JOAQUIN COUNTY

I. MONITORING AND REPORTING PROGRAM REQUIREMENTS

This Monitoring and Reporting Program (MRP) is issued pursuant to the California Water Code Section 13267 and 13383. Because the Discharger has jurisdiction over facilities that discharge waste subject to storm water regulations, this MRP is necessary to ensure compliance with Order No. R5-2004-0136 (hereafter "Order").

The Discharger shall not cease or reduce any monitoring required by this MRP unless and until the Central Valley Regional Water Quality Control Board (hereafter "Regional Board") or the Regional Board's Executive Officer issues a revised MRP.

- A. **Annual Monitoring Plan:** The Discharger shall submit by **1 April** of each year a proposed Annual Monitoring Plan that includes clearly defined tasks, responsibilities, and schedules for implementation of monitoring activities for the next fiscal year. The Annual Monitoring Plan shall be deemed to be final and enforceable under this Order as of **1 July** of each year unless determined to be unacceptable by the Executive Officer. The Discharger shall address any comments or conditions of acceptability received from the Executive Officer on the Annual Monitoring Plan.
- B. **Annual Report:** The Discharger shall submit, in both electronic and paper formats and no later than **1 September** of each year, an Annual Report documenting the progress of the Discharger's implementation of its Storm Water Management Plan (SWMP) and the requirements of this Order. The Annual Report shall discuss the Discharger's status of compliance with this Order and the SWMP, including a compilation of deliverables and milestones completed during the previous fiscal year, and an assessment of program effectiveness with regard to (1) BMP performance standards defined in the SWMP, and (2) compliance with the prohibition on causing or contributing to exceedances of applicable water quality standards.

In each Annual Report, the Discharger may propose pertinent updates, improvements, or revisions to its SWMP, which shall be complied with under this Order unless disapproved by the Executive Officer or acted upon in accordance with this Order.

The Annual Reports shall also include the following:

- 1. Documentation of compliance with requirements for annual reports listed in 40 CFR 122.42(c);
- 2. An executive summary discussing the effectiveness of the SWMP to reduce storm water pollution to the maximum extent practicable (MEP) and to achieve compliance with water quality standards in receiving waters;
- 3. A summary of activities conducted by the Discharger;
- 4. Identification of BMPs and a discussion of their effectiveness at reducing urban runoff pollutants and flow, where applicable;
- 5. The results of all monitoring conducted during the effective year of the Annual Report and a summary of all previous years' data for monitoring conducted pursuant to a municipal storm sewer permit. Monitoring results shall be compared with applicable water quality standards in the Basin Plan, the California Toxics Rule (CTR), and Title 22 of the California Code of Regulations (Title 22). The summary shall include exceedances of water quality standards for storm sewer discharge and receiving water monitoring;
- 6. Any Reports of Water Quality Exceedance prepared pursuant to Receiving Water Limitations of this Order;
- 7. A map or maps showing all monitoring station locations and descriptions of each location, receiving waters and urbanized areas at the Port; and
- 8. Recommendations to improve the monitoring program, BMPs, performance standards, and the SWMP to address water quality exceedances and potential pollutant sources, and to meet the MEP requirement.
- 9. In addition to the requirements listed above, the final Annual Report of this Order (i.e., the Annual Report for the fiscal year ending **30 June 2009**) shall include: (1) an estimate of total pollutant loads attributable to urban runoff for each discharge point for the permit term; (2) a comparison of the former with historic pollutant load estimates; and (3) an evaluation of the long-term trends in storm sewer discharge and receiving water quality.
- C. **Notification of Water Quality Exceedance:** The Discharger shall notify the Regional Board, in writing, of any exceedance of applicable water quality standards within **90 days** of the monitoring event from which the exceedance was detected.

- D. **Report of Water Quality Exceedance:** Upon a determination by either the Discharger or the Regional Board that discharges are causing or contributing to exceedance(s) of an applicable water quality standard, the Discharger shall prepare a RWQE pursuant to the procedure described in Receiving Water Limitation B.2 of this Order.
- E. Certification: All work plans and reports submitted to the Regional Board shall be signed and certified pursuant to federal regulations at 40 CFR 122.41(k). Each report shall contain the following completed declaration:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility, of a fine and imprisonment for knowing violations.

Executed on the day of	, 20,	
at		
(Signature)	(Title)	"

The Discharger shall mail the original of each annual report to:

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD – CENTRAL VALLEY REGION 11020 SUN CENTER DRIVE #200 RANCHO CORDOVA, CA 95670

A copy of each annual report shall also be mailed to:

REGIONAL ADMINISTRATOR ENVIRONMENTAL PROTECTION AGENCY REGION 9 75 Hawthorne Street San Francisco, CA 94105

II. MONITORING PROGRAM

The primary objectives of the Monitoring Program include:

- Provide data necessary to assess compliance with this Order;
- Measuring and improving the effectiveness of the SWMP and implemented BMPs;
- Assessing the physical, chemical, and biological impacts of urban runoff on receiving waters;
- Characterizing urban runoff discharges;
- Identifying sources of pollutants; and
- Assessing the overall health and evaluating long-term trends in receiving water quality.

Ultimately, the Regional Board intends for monitoring results to be used to refine the Port's SWMP to reduce pollutant loadings and protect and enhance the beneficial uses of the receiving waters in the urbanized areas of San Joaquin County.

The Discharger shall implement the Monitoring Program as follows:

A. Urban Runoff and Receiving Water Monitoring

The Discharger shall monitor the following stations as part of direct discharge monitoring:

Station ID No.	Drainage Description or Location		
East Complex Runoff			
D-4	Docks 2 thru 7; drainage to a discharge pipe		
D-7	Area east of Slip 8; bulk cement and loading areas;		
	drainage to a discharge pipe		
D-8	Slip 8 loading dock; drainage to a discharge pipe		
D-10	Dock 8 and area along Road 5 and Road C; drainage to		
	a discharge pipe		
D-11	Docks 9 thru 11 and area around bulk fertilizer		
	warehouses; drainage to a discharge pipe		
D-15	Shop and office area; drainage to a discharge pipe		
Retention Basin Inlet	Southern two-thirds of property, south of Road H		
(RBI)			
West Complex Runoff			
West Complex	Southwest corner of island; discharges to Burns Cutoff		
Pump Station (WC)			

Station ID No.	Drainage Description or Location		
Receiving Water			
R-1	In the San Joaquin River upstream of the East Complex retention basin discharge, and south of the Santa Fe Railroad bridge		
R-2	In the DWSC downstream of the east Burns Cutoff confluence, and downstream of the East Complex outfalls but upstream of the West Complex outfall		
R-3	In the DWSC turning basin, east and upstream of the Port's East Complex outfalls, and downstream of the City of Stockton's industrial discharges		
R-4	In the DWSC downstream (west) of the west Burns Cutoff confluence		
R-5	In the Burns Cutoff downstream of the West Complex pump station		

Monitoring shall be conducted at the stations listed above for **three storm events per year**¹. The Discharger shall target for monitoring the first significant² storm event of the year preceded by 30 days of dry weather. The other two monitored storm events shall be significant, representative³, and preceded by at least three days of dry weather. Each monitoring event shall be separated by at least 20 days.

The Discharger shall collect flow data at the time of sampling for applicable monitoring stations. Receiving water or urban discharge flow may be estimated using U.S. Environmental Protection Agency (USEPA) methods⁴ at sites where flow measurement devices are not in place. Monitoring may be postponed if a given monitoring station cannot be safely accessed because of hazardous weather, high river flow conditions or any other reasonable condition.

The Discharger shall analyze storm water samples collected from monitoring stations as follows:

¹ This refers to the permit year of July 1 to June 30.

² A significant storm event is one that produces a continuous discharge of storm water for an hour or more.

³ "Representative" means the depth and duration of the event should not vary by more than 50 percent from the average depth and duration.

⁴ NPDES Storm Water Sampling Guidance Document, USEPA 833-B-92-001, July 1992

Station ID No.	Parameter	Sample Type
All Stations	Chemical oxygen demand	grab and composite ⁵
	Dissolved oxygen	grab
	Diesel range organics	composite
	Gasoline range organics	composite
	Hardness	composite
	pH	grab
	Specific conductance	grab
	Temperature	grab
	Total dissolved solids	composite
	Total suspended solids	composite
	Turbidity	composite
D-4	Polynuclear aromatics (PNAs)	composite
	Heavy metals ⁶	composite
D-7	Biochemical oxygen demand	grab
	Nitrate/nitrite	composite
	Ammonia	composite
	Total Kjeldahl nitrogen (TKN)	composite
	Aluminum	composite
	Iron	composite
	Lead	composite
	Zinc	composite
D-8	Oil & grease	composite
	Aluminum	composite
	Iron	composite
	Lead	composite
	Zinc	composite
D-10	Biochemical oxygen demand	grab
	Oil & grease	composite
	Heavy metals	composite
D-11	Biochemical oxygen demand	grab
	Nitrate/nitrite	composite
	Ammonia	composite
	TKN	composite
	Oil & grease	composite
	Sulfate	composite
	Sulfide	composite
	Sulfur	composite
	Heavy metals	composite

⁵ Reported as event mean concentration for composites.
⁶ These are aluminum, antimony, arsenic, barium, beryllium, cadmium, total chromium, hexavalent chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc.

Station ID No.	Parameter	Sample Type
D-15	Sulfate	composite
	Sulfide	composite
	Sulfur	composite
	Aluminum	composite
	Iron	composite
	Lead	composite
	Zinc	composite
RBI	Biochemical oxygen demand	grab
	Benzene	grab
	Toluene	grab
	Ethylbenzene	grab
	Xylene	grab
	MTBE	composite
	Nitrate/nitrite	composite
	Ammonia	composite
	TKN	composite
	Oil & grease	composite
	Pesticides ⁷	composite
	Phosphorus	composite
	Sulfate	composite
	Sulfide	composite
	Sulfur	composite
	Heavy metals	composite
WC	Biochemical oxygen demand	grab
	Oil & grease	composite
	Pesticides	composite
	Polychlorinated biphenyls (PCBs)	composite
	Semivolatile organic compounds	composite
	Volatile organic compounds	grab
	Heavy metals	composite
R-1	Biochemical oxygen demand	grab
	Benzene	grab
	Toluene	grab
	Ethylbenzene	grab
	Xylene	grab
	MTBE	grab
	Nitrate/nitrite	grab
	Ammonia	grab
	TKN	grab
	Oil & grease	grab
	Pesticides	grab

⁷ These shall include carbamates, chlorophenoxyacid herbicides, organochlorine pesticides, organophosphorus pesticides, and triazine pesticides.

Station ID No.	Parameter	Sample Type
R-1 (cont.)	Phosphorus	grab
	Sulfate	grab
	Sulfide	grab
	Sulfur	grab
	PNAs	grab
	PCBs	grab
	Semivolatile organic compounds	grab
	Volatile organic compounds	grab
	Heavy metals	grab
R-2	Same as for R-1	Same as for R-1
R-3	Same as for R-1	Same as for R-1
R-4	Same as for R-1	Same as for R-1
R-5	Same as for R-1	Same as for R-1

All sample collection and analysis shall follow standard USEPA protocols. The results of analysis shall be reported in the appropriate standard units. Additionally, the Discharger shall review Appendix 4 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*⁸ (State Water Resources Control Board, 2000) to ensure that minimum analytical detection levels are as close as practicable to the minimum levels described for priority pollutants.

Urban discharge grab samples shall be collected during the first 30 minutes of a storm event. If collection of the samples during the first 30 minutes is impracticable, grab samples can be taken as soon as practicable thereafter; however, the Discharger shall explain in its annual report why the grab samples could not be taken in the first 30 minutes. Receiving water grab samples shall be collected at mid-depth and in midstream of the water body, and between two and six hours after commencement of runoff from the Port

Composite sampling shall be flow weighted with ongoing sampling either for the duration of the storm, with a maximum composite period of 24 hours, or for the first three hours of discharge. Because of the inherent difficulty in fully capturing an entire storm event, the Discharger shall report the portion of the storm event during which samples were collected. Flow-weighted composite samples may be taken with a continuous sampler or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire discharge or for the first three hours of the discharge, with each aliquot being separated by a minimum period of fifteen minutes. For a flow weighted composite sample, only one analysis of the composite of aliquots is required.

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⁸ This document is available at http://www.swrcb.ca.gov/iswp/final.pdf

B. Urban Runoff Flow Monitoring

The Discharger shall take the following actions to better estimate urban runoff discharge flows from the Port of Stockton:

- 1. The Discharger shall install a flow meter at the West Complex pump station, which discharges to the Burns Cutoff. The flow meter shall be installed and functional by 1 November 2004.
- 2. The Discharger shall install a flow meter at the East Complex Retention Basin pump station as soon as practicable.
- 3. The Discharger shall conduct a study to determine the feasibility of installing flow meters at the following East Complex gravity flow outfalls: D-4, D-7, D-8, D-10, D-11, and D-15. This study shall be submitted to the Regional Board as part of the 2004/2005 Annual Report, due **1 September 2005**.
- 4. The Discharger shall conduct a study to determine the feasibility of collecting representative samples of sheet flow runoff at Port docks. The study shall consider retrofitting the docks to collect sheet flow into a point source discharge. The feasibility study shall be submitted to the Regional Board as part of the 2004/2005 Annual Report, due 1 September 2005.

C. East Complex Retention Basin Monitoring

The retention basin shall be monitored via grab samples collected at mid-depth from the deepest point in the basin. This monitoring shall occur prior to each outfall discharge event. If urban discharges enter the retention basin while it is discharging to the San Joaquin River, then the Discharger shall resample the basin at least daily as long as inlet discharges are occurring. Samples shall be analyzed for the same parameters as those listed for the retention basin inlet.

The Discharger shall also collect and analyze upstream and downstream monitoring of receiving water samples during discharge events from the East Complex retention basin to the San Joaquin River. Sampling and analytical protocols for this monitoring shall be the same as for the receiving water monitoring described in MRP Section II.A.

D. Reductions in Monitoring

If a constituent is not detected at the method detection limit for its respective test method in five of the first seven sampling events, and if any detected concentrations are below water quality standards, the Discharger may stop monitoring these constituents for the two monitoring events following the first event of the year. If a

constituent is detected above water quality standards during reduced monitoring, then the Discharger shall resume monitoring for the three storm events per year.

E. Upstream Source Identification Monitoring

If urban runoff monitoring results in a detection of a parameter above applicable water quality standards, the Discharger shall conduct upstream source identification within its storm sewer system to identify the source(s) of pollutants. This monitoring shall occur during subsequent qualifying storm events.

The Discharger shall describe its methodology for conducting this monitoring and present a map showing upstream monitoring station locations in its revised SWMP.

F. Industrial Activities Monitoring

The Discharger shall develop storm water pollution prevention plans (SWPPPs), including storm water quality monitoring plans, for Discharger-operated industrial areas that would otherwise qualify for coverage under the General Industrial Permit. The SWPPPs shall be consistent with this general permit. Qualifying industrial areas identified⁹ by the Discharger include its maintenance shop, fleet vehicle fueling area, equipment wash pad, and fertilizer warehouses.

G. Monitoring during Loading and Unloading of Bulk Materials

This monitoring shall consist of water quality analysis and visual observations as follows:

- 1. During all bulk material loading and unloading events, the Discharger shall conduct visual observations of these activities to monitor the effectiveness of spill prevention BMPs. The Discharger shall also monitor ship activities to prevent, to the MEP, ship operators from discharging vessel equipment wash water and deck wash-down water. Documentation shall include the date and time of inspection, the name and title of the inspector, the dock where material transfer occurred, the material and quantity transferred, whether or not any material was spilled, a description of efforts to cleanup any spills, and weather conditions.
- 2. In the event of an observed spill, the Discharger shall collect grab samples of the appropriate water body at points upstream, downstream, and beneath the loading dock. Samples shall be collected after the material transfer has begun, and at a time that would best represent any water quality impacts caused by this activity. The Discharger shall also (1) document the location, date and time of sampling, the material and quantity transferred, when material transfer began and ended, and weather conditions; and (2) evaluate analytical results to determine the

⁹ These areas were identified in the Port's 2002/2003 Storm Water Monitoring Program Plan.

effectiveness of BMPs in controlling the discharge of bulk materials into receiving waters, and any associated water quality impacts.

H. Urban Runoff and Water Column Toxicity Monitoring

The Discharger shall analyze samples to evaluate the extent and causes of toxicity in urban runoff and receiving waters, and to provide information to support identification of practices that eliminate sources of toxicity or remove them to the MEP.

The Discharger shall conduct short-term chronic toxicity testing at each downstream receiving water monitoring station (i.e., Stations R-2, R-4 and R-5) and at the West Complex pump station (Station WC) during two of the five years of this Order's term. These monitoring years shall not be back-to-back. Toxicity monitoring shall be conducted for the same **three storm events** for which receiving water and urban runoff are monitored.

The discharger shall also conduct this toxicity testing at the East Complex Retention Basin pump station during the same years as for the above toxicity testing. Testing shall be conducted during three urban runoff discharge events per year. If three discharge events don't occur during the monitoring year, the Discharger shall make up toxicity testing events the following year.

Toxicity analysis shall include at least the following two freshwater test species for each storm event: Fathead minnow (*Pimephales promelas*) and water flea (*Ceriodaphnia dubia*). If new toxicants are discovered in the first toxicity testing, the Discharger will perform additional toxicity tests as directed by the Executive Officer.

If toxicity is detected in a sample above that in upstream receiving waters, a dilution series shall be initiated (0.5x steps) ranging from the undiluted sample (or the highest concentration that can be tested within the limitations of the test methods or sample type) to less than or equal to six percent of the sample. Further, if toxicity is detected at a given monitoring station, the Discharger will continue conducting toxicity testing and TIEs until the nature and cause(s) of the toxicity are defined.

1. Toxicity Identification Evaluations (TIE)

The Discharger shall begin a Phase I TIE immediately on all samples that are substantially toxic to either test species. Alternatively, the Discharger may employ directed TIE methods in parallel to the toxicity testing (e.g., PBO addition) instead of a Phase I TIE when there are strong indications as to the cause(s) of toxicity.

¹⁰ Substantial toxicity means the amount of toxicity necessary to successfully conduct a Phase I TIE. Toxic Units are calculated by dividing 100 by the calculated median test response value (e.g., LC50 or EC50). For example, a LC50 of 50% sample equals 2 Toxic Units. Ceriodaphnia TIEs require at least 50% mortality in undiluted sample (1 Toxic Unit) at any time during the 7-day duration of the initial chronic bioassay (SCCWRP).

2. Toxicity Reduction Evaluations (TRE)

a. When the same pollutant or class of pollutants is identified through the TIE process as causing at least 50 percent of the toxic responses in at least three samples at a sampling location, a TRE shall be performed for that identified toxic pollutant. The TRE shall include all reasonable steps to identify the source(s) of toxicity and discuss appropriate BMPs to eliminate the causes of toxicity. Once the source of toxicity and appropriate BMPs are identified, the Discharger shall submit the TRE to the Executive Officer for approval.

At a minimum, the TRE shall include a discussion of the following items:

- i. The potential sources of pollutant(s) causing toxicity;
- ii. Recommended BMPs to reduce the pollutant(s) causing toxicity;
- iii. Proposed changes to the SWMP to reduce the pollutant(s) causing toxicity; and
- iv. Suggested follow-up monitoring to demonstrate that toxicity has been removed.
- b. If TRE implementation for a specific pollutant coincides with Total Maximum Daily Load (TMDL) implementation for that pollutant, the efforts may be coordinated.
- c. Upon approval by the Executive Officer, the Discharger shall implement the recommended BMPs and take all reasonable steps necessary to eliminate toxicity.
- d. The Discharger shall develop a maximum of two TREs per year. If applicable, the Discharger may use the same TRE for the same toxic pollutant or pollutant class in different watersheds or basins. The TRE process shall be coordinated with TMDL development and implementation to avoid overlap.
- e. The Discharger shall report on the development, implementation, and results for each TRE in the Annual Reports, beginning the year following the identification of each pollutant or pollutant class causing toxicity.

I. Bioassessment

The Discharger shall participate and coordinate with the Surface Water Ambient Monitoring Program (SWAMP) being developed by the State Water Resources Control Board (State Board). The SWAMP has begun work on a statewide effort to

determine how to identify reference sites with the goal of Index of Biological Integrity (IBI) development.

The purpose of this requirement is to detect biological trends in receiving waters and to collect data for the development of an IBI. The ultimate goals of bioassessment are to assess the biological integrity of receiving waters, to detect biological responses to pollution, and to identify probable causes of impairment not detected by chemical and physical water quality analysis.

- 1. The Discharger shall participate in and coordinate with the SWAMP to identify the most appropriate locations for bioassessment stations in the vicinity of the Port.
- 2. The Discharger shall submit a bioassessment monitoring plan by **1 April 2005**. Monitoring shall begin as soon as practicable after approval of the monitoring plan and stations by the Executive Officer. A minimum of three replicate samples shall be collected at each station during each sampling event.
- 3. The Permittees shall develop Standard Operation Procedures (SOPs) for the bioassessment monitoring program that describe all procedures and responsible parties. The SOPs must contain step-by-step field, laboratory, data entry, and QA/QC procedures. A copy of the SOPs shall be made available to the Executive Officer upon request.
- 4. Field sampling must conform to the SOPs established for the California Stream Bioassessment Procedure (CSBP) when appropriate. For sampling of aquatic environments where the CSBP is not appropriate (e.g., an estuary or unwadable stream), the California Department of Fish and Game (DFG) and the Executive Officer shall be consulted in order to determine the most appropriate protocol to be implemented (this method will likely be the Hester-Dendy artificial substrate method). Field crews shall be trained on aspects of the protocol and appropriate safety issues. Field data and sample Chain-of-Custody (COC) forms shall be examined for completion and errors by the field crews, the Discharger, and the receiving laboratory. These forms shall be made available to DFG or the Executive Officer upon request.
- 5. Field sampling events shall monitor seasonal variation by occurring either in the spring and fall or summer and winter. This sampling shall be performed by personnel (i.e., consultants, Port employees, or citizen volunteers) properly trained in field and quality assurance procedures.
- 6. A professional environmental laboratory shall perform all laboratory, quality assurance, and analytical procedures. Taxonomic identification laboratories shall process the biological samples; this usually consists of sub-sampling organisms, enumerating and identifying taxonomic groups and entering the information into

an electronic format. There should be intra-laboratory QA/QC results for subsampling, taxonomic validation and corrective actions. Biological laboratories should also maintain reference collections, vouchered specimens (the Discharger can request return of their sample voucher collections) and remnant collections. Biological laboratories shall participate in an inter-laboratory (external) taxonomic validation program at a recommended level of 20 percent for the first two years of the program. If there are no substantial QA/QC problems, the level of external validation may be decreased to 10 percent in the third year of monitoring upon approval by the Executive Officer. External QA/QC should be arranged through the DFG's Aquatic Bioassessment Laboratory in Rancho Cordova or a comparably qualified private laboratory.

- 7. The following results and information shall be included in annual reports:
 - a. All physical, chemical and biological data collected in the assessment;
 - b. Photographs and GPS locations of all stations;
 - c. Documentation of quality assurance and control procedures;
 - d. Analysis that shall include calculation of the metrics using the multi-habitat transect method;
 - e. Comparison of mean biological and habitat assessment metric values between stations and year-to-year trends;
 - f. Electronic data formatted to the DFG Aquatic Bioassessment Laboratory for inclusion in the Statewide Access Bioassessment Database; and
 - g. Copies of all QA/AC documents from laboratories.

III. STANDARD MONITORING PROVISIONS

All monitoring activities shall meet the following requirements:

A. Monitoring and Records [40 CFR 122.41(j)(1)]

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

B. Monitoring and Records [40 CFR 122.41(j)(2)] [California Water Code §13383(a)]

The Discharger shall retain records of all monitoring information, including all calibration and maintenance of monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the Report of Waste Discharge and application for this Order, for a period of at least five (5) years from the date of the sample, measurement, report, or application. This period may be extended by request of the Regional Board or USEPA at any time and shall be extended during the course of any unresolved litigation regarding this discharge.

- C. Monitoring and Records [40 CFR 122.41(j)(3)]. Records of monitoring information shall include:
 - 1. Date, location, and time of sampling or measurements;
 - 2. Individual(s) who performed the sampling or measurements;
 - 3. Date analyses were performed;
 - 4. Individual(s) who performed the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. Results of such analyses.

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D. Monitoring and Records [40 CFR 122.41(j)(4)]

All sampling, sample preservation, and analyses must be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this Order.

E. Monitoring and Records [40 CFR 122.41(j)(5)]

The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Order shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by both.

- F. All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by an appropriate governmental regulatory agency.
- G. For priority toxic pollutants that are identified in the CTR (65 Fed. Reg. 31682), the MLs published in Appendix 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California 2000 (SIP) shall be used for all analyses, unless otherwise specified. For pollutants not contained in Appendix 4 of the SIP, the test method and method detection limit (MDL) listed in Table 1 shall be used for all analyses, and the ML for these parameters shall be lower than or equal to the lowest applicable water quality criteria from the Basin Plan.
- H. The Monitoring Report shall specify the analytical method used, the MDL and the ML for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported with one of the following methods, as appropriate:
 - 1. An actual numeric value for sample results greater than or equal to the ML;
 - 2. "Not-detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used; or

- 3. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML. The estimated chemical concentration of the sample shall also be reported. This is the concentration that results from the confirmed detection of the substance by the analytical method below the ML value.
- I. For priority toxic pollutants, if the Discharger can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR 136, the lowest quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure (assuming that all the method-specified sample weights, volumes, and processing steps have been followed) may be used instead of the ML listed in Appendix 4 of the SIP. The Discharger must submit documentation from the laboratory to the Executive Officer for approval prior to raising the ML for any constituent.
- J. Monitoring Reports [40 CFR 122.41(1)(4)(ii)]

If the Discharger monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136, unless otherwise specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Annual Report.

K. Monitoring Reports [40 CFR 122.41(1)(4)(iii)]

Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this Order.

L. The Executive Officer or the Regional Board, consistent with 40 CFR 122.41, may approve changes to the Monitoring Program, after providing the opportunity for public comment, either (1) by petition of the Discharger or by petition of interested parties after the submittal of the Annual Report. Such petition shall be filed not later than 60 days after the Annual Report submittal date; or (2) as deemed necessary by the Executive Officer following notice to the Discharger.

Ordered by $_$		
	THOMAS R. PINKOS, Executive Officer	
	Date	